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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,227

07/17/2006

Kenneth E. Welker

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WesternGeco, L. L. C.
Intellectual Property Department
P.O. Box 2469
Houston, TX 77252-2469

EXAMINER

HUGHES, SCOTT A

ART UNIT	PAPER NUMBER
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3663

MAIL DATE	DELIVERY MODE
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11/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,227	Applicant(s) WELKER ET AL.	
	Examiner SCOTT A. HUGHES	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-69 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-35, drawn to a marine seismic survey apparatus.

Group II, claim(s) 36-69, drawn to a method for use in a marine seismic survey including applying inertial measurements to a known point to determine positions of selected points.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I and Group II are related apparatus and process. Group I and Group II contain multiple species and therefore include multiple apparatus and multiple processes. Multiple apparatus and processes is not an allowable combination of categories of invention under PCT Rules 13.1 and 13.2. Further, Group I and Group II do not share a special technical feature as the apparatus claims do not require applying inertial measurements to known points to determine positions of selected points in the seismic survey spread as is required by the method claims.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Upon election of Group I or Group II, applicant is required to elect a single species of the following:

a) The embodiment wherein the survey object with the inertial unit coupled thereto is a seismic cable only.

b) The embodiment wherein the survey object with the inertial unit coupled thereto is a seismic receiver only.

c) The embodiment wherein the survey object with the inertial unit coupled thereto is a steering device only.

d) The embodiment wherein the survey object with the inertial unit coupled thereto is a seismic source only.

Upon election of a above, applicant is required to elect a single species of the following:

aA) The embodiment wherein the seismic cable is a streamer only.

aB) The embodiment wherein the seismic cable is an ocean bottom cable only.

Upon election of b above, applicant is required to elect a single species of the following:

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- bA) The embodiment wherein the receiver is a hydrophone only.
- bB) The embodiment where in the receiver is a geophone only.
- Bc) The embodiment where the receiver is a hydrophone and geophone only.

Upon election of c above, applicant is required to elect a single species of the following:

- cA) The embodiment wherein the steering device is a Q fin only.
- cB) The embodiment wherein the steering device is a bird only.

Upon election of d above, applicant is required to elect a single species of the following:

- aA) The embodiment wherein the seismic source is an air gun only.
- aB) The embodiment wherein the seismic source is a vibrator only.

Upon election of a, b, c, or d only above, applicant is required to elect a single species of the following:

- A) The embodiment wherein taking inertial measurements occurs during deploying the spread only.
- B) The embodiment wherein taking inertial measurements occurs during retrieving the spread only.
- C) The embodiment wherein taking inertial measurements occurs during taking the survey only.

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D) The embodiment wherein taking inertial measurements occurs during deploying the spread, retrieving the spread, and taking the survey.

Upon election of A, B, C or D only above, applicant is required to elect a single species of the following:

- i) The embodiment wherein the spread is deployed to the bottom of a body of water only.
- ii) The embodiment wherein the spread is deployed to the surface of a body of water only.

Applicant is required, in reply to this action, to elect a single species of each of the above species election requirements to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic:

Claims 1, 8-14, 19-24, 36, 38-40, 42-43, 45, 47, 5-62, 64-65, and 67.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Same as given above for Groups I and II, and each species requires different components or method steps to be performed.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. HUGHES whose telephone number is (571)272-6983. The examiner can normally be reached on M-F 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott A. Hughes/
Examiner, Art Unit 3663